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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,032	08/08/2006	Mats Johansson	P/1228-209	2006
2352	7590	10/19/2007	EXAMINER	
OSTROLENK FABER GERB & SOFFEN			LUONG, VINH	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/582,032	JOHANSSON ET AL.
	Examiner Vinh T. Luong	Art Unit 3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1)  Responsive to communication(s) filed on 07 June 2006.
- 2a)  This action is FINAL. 2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4)  Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-8 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on 07 June 2006 is/are: a)  accepted or b)  objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some \*
  - c)  None of:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
 Vinh T. Luong  
 Primary Examiner

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>6/7/06</u>	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input checked="" type="checkbox"/> Other: <u>Attachment</u> .

1. The preliminary amendment filed on June 7, 2006 has been entered.
2. The drawings are objected to because the drawings are not in compliance with 37 CFR 1.84. For example, 37 CFR 1.84(u)(1) states that where only a single view is used in an application to illustrate the claimed invention, it must not be numbered and the abbreviation "FIG." must not appear, however, Applicant's single view is numbered as "FIG. 1."

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The disclosure is objected to because of the informalities, *e.g.*, the recitation "Fig. 1" on, *e.g.*, page 3 of the specification should be changed to, *e.g.*, "the single figure." See 37 CFR 1.84(u)(1). Appropriate correction is required.

4. Claims 1-8 are objected to because they include reference characters which are not enclosed within parentheses. See, e.g., reference characters P<sub>1</sub> and P<sub>2</sub> in Claim 1.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term “normal” in Claim 1 is a relative term which renders the claim indefinite. The term “normal” is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For example, it is unclear what objective test(s) is(are) used/required in order to determine whether a man’s hand is normal or abnormal. See the term “aesthetically pleasing” in *Datamize LLC v. Plumtree Software Inc.*, 75 USPQ2d 1801 (Fed. Cir. 2005).

The recitation “the lower spokes are separated from the upper spokes by spaces shaped to be able to receive a driver’s elbows” in Claim 5 is indefinite because the relationship of the claimed parts, such as, the upper and lower spokes is not based on an objective standard, but on a subjective standard such as the unspecified build of the elbows of a particular driver. Whether a

particular steering wheel is covered by the claim or not would depend upon, e.g., the size, shape, and build of the elbows or hands of the particular driver and the habit of placing the elbows on the steering wheel of the particular driver. *Ex parte Brummer*, 12 USPQ2d 1653 (Bd. Pat. App. & Inter. 1989) cited in MPEP 2173.05(b).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1-8, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwasa et al. (US Patent No. 5,165,302) in view of Hiramitsu et al.'306 (US Patent No. 5,002,306 cited by Applicant).

Regarding Claim 1, Iwasa teaches a vehicle steering wheel 10 comprising:

a rim 22 (FIG. 4),

a signal cap 28 inside the rim 22;

two upper spokes 20 extending between the rim 22 and the signal cap 28, the upper

spokes 20 extending substantially along a horizontal symmetry axis X (FIG. 5) of the steering wheel 10 towards a center of the wheel 10 (FIG. 5);

two lower spokes 20 also extending between the signal cap 28 and the rim 22, the lower spokes 20 having an upper edge (see Attachment hereinafter “Att.”);

the two lower spokes 20 are shaped and positioned to be graspable by a normal man's hand, the lower spokes 20 extend from positions around the rim 22 so that points (P<sub>1</sub> and P<sub>2</sub> in Att.) that are in line with the upper edge of the respective lower spokes 20 on the outer surface of the rim 22 are located between 30° and 60° (see angle  $\alpha$  in Att.) below the horizontal symmetry axis on either side of the vertical symmetry axis Y of the steering wheel 10, and the upper edge of the lower spokes 20 is in line with the respective points (P<sub>1</sub> and P<sub>2</sub> in Att.) and forms an angle ( $\beta$  in Att.) of between 62° and 82° with the vertical symmetry axis Y of the steering wheel 10, and a multifunctional switch module 26 including control buttons operable for remote actuation of vehicle functions, the module 26 is located between the two lower spokes 20 *on* the signal cap 28, whereby the driver can operate the module 26 while grasping the lower spokes 20. *Ibid.* col. 4, line 57+.

In summary, Iwasa teaches the invention as claimed except the module *beneath* the cap.

It is common knowledge in the art to rearrange the position of Iwasa's module from being on the cap to beneath the cap in order to facilitate the operation of the switches of the module for the driver. The switch module beneath the cap is notoriously well known in the steering wheel art as evidenced by the art cited. See, e.g., switch module 17, 22 in FIG. 2 of US Patent No. 5,203,226 issued to Hongou et al., switch module 23 in FIG. 1 of US Patent No. 5,002,306 issued to Hiramitsu et al. cited by Applicant, and switch module 13 in JP-6-329025

cited by Applicant. See *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) and MPEP 2144.04.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange Iwasa's module from being on the cap to beneath the cap in order to facilitate the operation of the switches of the module for the driver as taught or suggested by common knowledge in the art. The results of the rearrangement are predictable. *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (St. Ct. 2007) and *Ex parte Smith*, 83 USPQ2d 1509 (BPAI 2007).

Regarding Claim 2, the two points (P<sub>1</sub> and P<sub>2</sub> in Att.) are situated about 30° below the horizontal symmetry axis X (FIG. 5) on either side of the vertical symmetry axis Y of the steering wheel 10. To change the instant angle to 40° would have been a matter of choice in design since the claimed structures and the function they perform are the same as the prior art. *In re Chu*, 66 F.3d 292, 36 USPQ2d 1089 (Fed. Cir. 1995) citing *In re Gal*, 980 F.2d 717, 719, 25 USPQ2d 1076, 1078 (Fed. Cir. 1992). See also legal precedent regarding changes in size/proportion in MPEP 2144.04.

Regarding Claims 3 and 4, the angle ((β in Att.) from the vertical symmetry axis Y of the steering wheel 10 to the respective points (P<sub>1</sub> and P<sub>2</sub> in Att) are about 60°. To change this angle to between 67° and 77° or 72° would have been a matter of choice in design since the claimed structures and the function they perform are the same as the prior art. *In re Chu*, *Ex parte Smith*, and MPEP 2144.04, *supra*.

Regarding Claim 5, the lower spokes 20 are separated from the upper spokes 20 by spaces 24' shaped to be able to receive a driver's elbows.

Regarding Claims 6 and 7, a width (W in Att.) of the graspable part of the upper edge of the lower spokes 20 is measured at a certain mm. To change this width to between 65 mm and 105 mm or about 85 mm would have been a matter of choice in design since the claimed structures and the function they perform are the same as the prior art. *In re Chu, Ex parte Smith*, and MPEP 2144.04, *supra*.

Regarding Claim 8, the module 26 is located symmetrically between the two lower spokes 20.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Manabe (FIG. 1), Hashiba (FIG. 2), Hongou et al. (FIG. 2), and Hiramitsu et al.'409 (FIG. 3).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinh T. Luong whose telephone number is 571-272-7109. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Luong

October 17, 2007



Vinh T. Luong  
Primary Examiner

# **ATTACHMENT**

FIG. 4

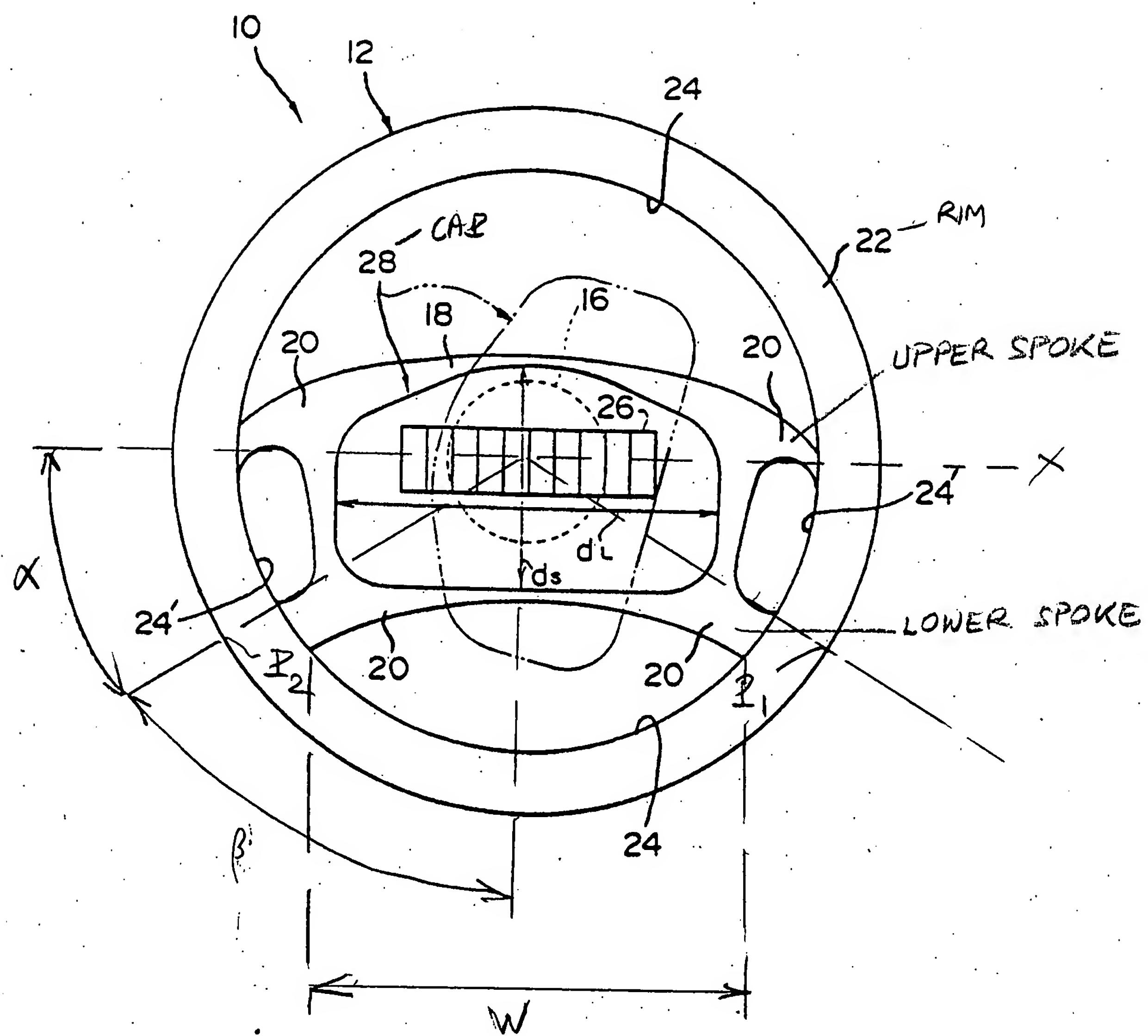
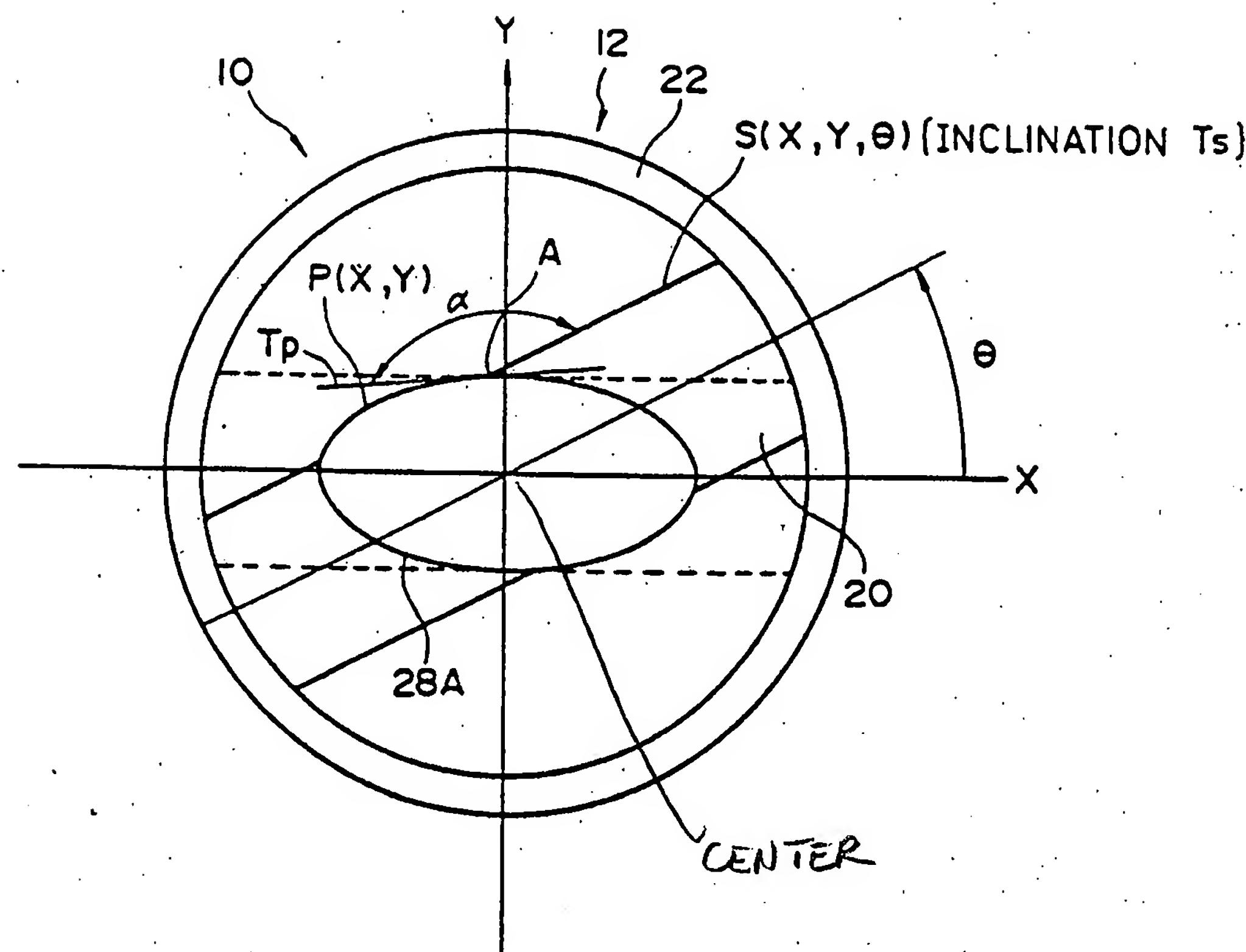


FIG. 5



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